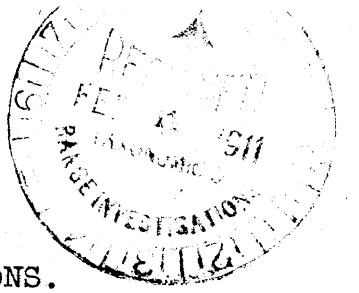

NO. 54.

BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

December 16 to 31, 1910.

NEW PLANT IMMIGRANTS.

AMYGDALUS PERSICA NECTARINA. (Amygdalaceae.) 29227. Seeds from Samarkand, Russian Turkestan. "A yellow clingstone nectarine, of medium size. Meat very firm and of medium sweet taste, not melting. A rare variety." (Meyer's introduction.) For distribution later.

ANONA CHERIMOLA. (Anonaceae.) 29316. Seed of cherimoyer from Oaxaca, Mexico. Presented by Prof. Felix Foex. "These seeds came from a very interesting fruit of good size, good shape, pretty appearance, second quality and having large seeds; the skin is as thick as the shell of a cocoanut, but not so hard. It resists well a pretty hard shock and pressure, and would be very good for packing and shipping." (Foex.) For distribution later.

BAMBOS SP. (Poaceae.) 29169. Seeds from Saharanpur, India. Received through Mr. R. S. Woglum, Bureau of Entomology. "Said to be seed of a bamboo which grows wild around Saharanpur." (Woglum.) For distribution later.

BERBERIS SPP. (Berberidaceae.) 29247-248. Seeds of barberries. No. 29247. From near Kan-Shugan, Chinese Turkestan. "A very spiny barberry having dentate somewhat undulate leaves, bearing racemes of coral-red berries. Found on sandy and sterile level places at elevations of about 8,000 feet above sea. Of value as an ornamental garden and park shrub in the northern sections of the United States." No. 29248. From near Guldscha, Russian Turkestan. "A tall-growing barberry found on dry sandy and sterile places, bearing blue berries. Of value like the preceding number." (Meyer's introductions.) For distribution later.

BRASSICA PEKINENSIS. (Brassicaceae.) 29269-270. Seed of two varieties of Chinese winter cabbage, "Pai tsai," from Kashgar, Chinese Turkestan, both able to withstand considerable amounts of alkali. (Meyer's introductions.) For distribution later.

CHAYOTA EDULIS. (Cucurbitaceae.) 29206-208, 29311-314. Fruits of three varieties from Kingston, Jamaica, presented by Mr. William Harris, Superintendent of Public Gardens, and of four varieties from San Salvador, Salvador, presented by Mr. Francisco G. du Cachon, Director General of Agriculture. For distribution later.

CUCUMIS MELO. (Cucurbitaceae.) 29231-241. Seeds of eleven forms of muskmelon from Russian Turkestan, including long-keeping varieties, some with remarkably few seeds, others keeping until New Year's, adapted for trial in dry, hot, irrigated sections of the Southwest. (Meyer's introductions.) For distribution later.

CUPRESSUS THURIFERA. (Taxaceae.) 29174. Seed from Mexico. Secured by the Supervisor of Forests, Tucson, Arizona, from the Director General of Agriculture of Mexico. From the wooded slopes of the mountains in the vicinity of Tasco and Orizaba, Mexico, at an elevation of 5,000 to 7,000 feet. For distribution later.

DIOSPYROS PEREGRINA. (Ebenaceae.) 29032. Seeds of persimmon. Presented by Mr. R. L. Proudlock, Arboricultural Expert, Eastern Bengal and Assam. "These two species (this and the following) are grown in this District (Dacca) for their edible fruit. The fruits are rather astringent unless they are allowed to become almost dead ripe before they are eaten." (Proudlock.) For distribution later.

DIOSPYROS SP. (Ebenaceae.) 29033. See preceding note.

DIOSPYROS SP. (Ebenaceae.) 29171. Seeds of persimmon from Tampico, Mexico. Presented by Mr. Clarence A. Miller, American Consul, who procured them from Mr. Mordelo Vincent. "The fruits from which these seed were taken are not very large; they have green skins and black meat, and resemble in contour the Japanese persimmon; they are very sweet but insipid and full of seeds." (Miller.) For distribution later.

ELAEAGNUS ANGUSTIFOLIA. (Elaeagnaceae.) 29225. Fruits of an oleaster, from Andishan, Russian Turkestan. "A large-fruited variety of oleaster sold on the market in Andishan. Locally the fruits are eaten as they are, as sweetmeats. Of value as a small ornamental tree and as a windbreak in alkaline sections in the mild-wintered semi-arid parts of the United States. Native name 'djigda'." (Meyer's introduction.) For distribution later.

IRIS SP. (Iridaceae.) 29264. Seed from near Kan-shugan, Chinese Turkestan. "An Iris growing in enormous quantities on alkaline plains at elevations of 6,000 feet above sea, the plants being a conspicuous feature in the landscape. Said to produce masses of light-blue flowers in early summer. Possibly of value as a ground-cover in alkaline sections of the United States." (Meyer's introduction.) For distribution later.

JUNIPERUS FOETIDISSIMA. (Pinaceae.) 29246. Fruit from near Guldscha, Russian Turkestan. "A juniper found on very sterile and stony mountain sides at high altitudes. Generally of very

gnarled and twisted shapes. Native name 'Artchak'. Much used in the mountains for building purposes and for fuel. To be tested in the intermountain sections of the United States." (Meyer's introduction.) For distribution later. (See photograph in Bulletin No. 36, this series.)

KNAUTIA SP. (Dipsacaceae.) 29261. Seeds from near Guldscha, Russian Turkestan. "An ornamental Dipsacaceous plant, perennial, found on a fertile, dry hill slope, growing from 2 to 4 feet high, bearing large flower heads of a purplish blue color, on stiff, erect stems. Of value apparently as a garden perennial for the northern sections of the United States." (Meyer's introduction.) For distribution later.

LIMONIA ACIDISSIMA. (Rutaceae.) 29170. Seed from the Saharanpur Botanical Garden, India. Received through Mr. R. S. Woglum, Bureau of Entomology. "I found one tree of this species in the Botanical Garden, at Saharanpur. Tree 25 to 30 feet tall and very healthy. Fruit ripening at this time of year (November 15). A small blackish fruit, almost ½ inch in diameter, containing a small pit of roundish form." (Woglum.) For distribution later.

MEDICAGO SATIVA. (Fabaceae.) 29260. Seed of alfalfa from near Kizil-Kurgan, Russian Turkestan. "An alfalfa found in dry decomposed-rock banks at elevations of between 5,000 and 7,000 feet above sea. Apparently the genuine wild form of the cultivated lucerne." (Meyer's introduction.) For distribution later.

NITRARIA SCHOBERI. (Zygophyllaceae.) 29250. Seed from near Ulukshat, Chinese Turkestan. "The desert currant, a spiny shrub growing from 3 to 7 feet high; found on alkaline and sandy places at elevations of 6,000 to 8,000 feet above sea. Foliage small and whitish, berries small, in erect racemes of black-violet color, juicy. They are edible and of sweet-saline taste. The rather high alkaline properties of these berries leave an unpleasant after-taste in one's mouth, while one's throat also feels the sharpness of the salt. The seeds occupy too much of the berry and the fruits have no value to the white races of men. This desert-currant possesses great sand-binding qualities, however, and deserves to be tested for this purpose in the elevated and cool arid and semi-arid regions of the United States." (Meyer's introduction.) For distribution later.

PASSIFLORA SP. (Passifloraceae.) 29319. Seed from Buitenzorg, Java. Presented by the Director of Agriculture, Department of Agriculture. Variety "Perbawati." For distribution later.

PINUS MONTEZUMAE. (Pinaceae.) 29175. Seed of pine from Mexico. Secured by the Supervisor of Forests, Tucson, Arizona, from the Director General of Agriculture of Mexico. Grows on mountain slopes at an elevation of 3,500 to 12,000 feet from Chihuahua southward to the vicinity of Orizaba, Mexico. For distribution later.

PISTACIA VERA. (Anacardiaceae.) 29219. Seed from Kokand, Russian Turkestan. "A good variety of pistache nut, coming from northern Afghanistan. Note: Pistache trees are said to come pretty nearly true from seeds." (Meyer's introduction.) For distribution later.

ROSA SPP. (Rosaceae.) 29251-258. Seeds of eight roses from Turkestan, some of them of probable value as garden and park shrubs in the northern and semi-arid sections of the United States. Some of them grow at altitudes of 9,000 feet, in dry, sterile places, and most of them are very spiny. (Meyer's introductions.) For distribution later.

STADMANNIA OPPOSITIFOLIA. (Sapindaceae.) 29153. Seed from Mr. G. Regnard, Port Louis, Mauritius. "Bois de fer. This tree is scarce in our forests; it produces bunches of a fruit resembling Nephelium longan, which are devastated before ripening by monkeys and bats. The pulp of these fruits give excellent jelly and jam, which recall those of quince. The tree is fine and its wood of an extreme tenacity." (Regnard.) For distribution later.

STATICE SP. (Plumbaginaceae.) 29266. Seed from near Kostakos, Russian Turkestan. "A remarkable Statice, perennial, having very finely divided foliage and producing masses of flowers of a most beautiful metallic blue color. Found on alkaline places in the desert. Of decided value as a cut flower and as an ornamental garden plant in alkaline sections of the United States." (Meyer's introduction.) For distribution later.

TRIFOLIUM FRAGIFERUM. (Fabaceae.) 29263. Seed from near Kok-su, Russian Turkestan. "A creeping, perennial clover, found along a water course on clayey, alkaline soil at an altitude of over 9,000 feet. Of value, possibly, as a forage and lawn plant in the cooler and intermountain sections of the United States." (Meyer's introduction.) For distribution later.

VANGUERIA MADAGASCARIENSIS. (Rubiaceae.) 29021. Seeds from Mauritius. Presented by Mr. G. Regnard, Port Louis. "Vavangue. A glabrous shrub 10 to 15 feet tall with very large and long leaves; flowers in copious peduncles, greenish-yellow, having an awful odor. Globose drupe 1½ inches thick with five large

bony stones. The fruit is eaten only when quite ripe and of a light brown color; the pulp is brown with a sweet acid flavor. Naturalized over Mauritius and the Indian Ocean Islands." (Regnard.) For distribution later.

VIGNA SESQUIPEDALIS. (Fabaceae.) 29267. Seed from Kashgar, Chinese Turkestan. "A very long bean, used by the local population as a green vegetable. Can also be dried and kept for winter use. Able to withstand considerable alkali in soil. Of value as a garden vegetable under irrigation in alkaline sections in the hot and dry parts of the United States." (Meyer's introduction.) For distribution later.

VIGNA UNGUICULATA. (Fabaceae.) 29262. Seed from Khodjent, Russian Turkestan. "A large variety of cowpea, used locally as a food for man and beast. Deserves to be tested under irrigation in the hot and dry sections of the United States." (Meyer's introduction.) For distribution later.

VIGNA UNGUICULATA. (Fabaceae.) 29193. Seeds from the Philippine Islands. Presented by Mr. H. M. Curran. "Setar (Tagalog). Cowpea cultivated by Negritos of Zambales." (Curran.) For distribution later.

VIGNA SPP. (Fabaceae.) 29271-310. Seeds of cowpeas grown at Arlington Farm, originating from single seeds or the results of crosses or collections from various sources. No. 29282. "Originally grown from a single seed from Livorno, Italy. The earliest cowpea yet grown at Arlington Farm, maturing at least ten days in advance of any other variety. The seeds are buff or pinkish-buff. The variety is very prolific and will probably be of value for growing northward." (Piper.) For distribution later.

WALLICHIA TREMULA. (Phoenicaceae.) 29188. Seed from the Philippine Islands. Presented by Mr. H. M. Curran, Forest Service, Manila. "Dumayuca (Tagalog). An ornamental, low growing palm. Known only from the Philippines. Midrib used for making brooms." (Curran.) One of a collection of twenty-two trees, vines and shrubs from the Philippines, presented by Mr. Curran, including the Oroxylum indicum, a rapid-growing tree, the wood of which is used for match-making, Mezoneuron glabrum, a rapid-growing vine with ornamental fruits, and an undetermined species of timber tree the milk of which is used for bird-lime. All for distribution later.

NOTES FROM FOREIGN CORRESPONDENTS.

BURMA, Myaing-ga-lay. Miss Susan E. Haswell writes November 11 that she can give us no information in regard to the species of Pueraria we asked for, but has written to Mr. Burkill, Superintendent of Economic Products for India, for information. She will send Karen potatoes (a sort of yam) next month. She writes, "There is a fruit here which I have never seen before. It is called by the Burmese K'doot-thi. It grows on a tree with spreading branches about 25 feet high, and very coarse, rough leaves. The fruit when ripe is very much the color of a strawberry, not quite so red; where not fully ripe is yellowish. The unripe fruit is a pale green. It is the most singular tree I ever saw. The fruit grows on sprays coming out in a perfect tangle from the lowest crotch where the branches start out. I thought some one had cut vines and tossed them up into the crotch of the tree. They are only three or four feet above the ground, very handy for small boys. I found one picking and eating. He had only left two ripe ones, though there are hundreds of small green ones. The fruit is very like a strawberry in flavor only a little more tart. The outside skin is rough and dotted with tiny yellow dots. The meat is white and full of tiny brown seeds. We eat skin and all. The fruit sprays are from 18 inches to over a yard in length and are all snarled together. The fruit grows like a string of beads along the sides of the sprays. I will try to get a photograph of the tree for you next month. The leaves of the K'doot grow on long stems. There are two varieties on the Toungos hills, I am told, but the fruit is much the same in flavor and size. I will write to a friend in Toungos and see if I can secure some seeds of the other variety. The one tree here has a cleft trunk, and in the cleft right on the ground, a number of small sprays have started and are bearing. I have dried the seeds of the two fruits, and will send them when danger of freezing in the mails is past."

CHINA, Szechuan, Yachow. Mr. W. F. Beaman writes November 18 that he is sending us a quantity of "nan-mu" seeds (Machilus nanmu ?). He saw Mr. E. H. Wilson, the Arnold Arboretum collector, a few weeks ago in Chengtu, the capital of the province, and reports that during the summer Mr. Wilson met with a very serious accident in which his leg was broken. He has not yet recovered from it.

COCHIN CHINA, Saigon. Mr. P. Morange, Director of the Agricultural Department writes November 18 that he is searching for seeds and plants of Luvunga nitida, which he will send as soon as he secures them. He is sending seeds of Feronia elephantum, packed in wet coir in order that the seeds may germinate en route.

HONDURAS, Tegucigalpa. Dr. R. Fritzgartner writes December 15 that he is trying to get for us the Copan tobacco, which is produced under license from the Honduran government and is the principal tobacco used in Central America, and the native tobacco, "tobacco de aqua", which is rather rare and has white flowers, while the Copan has rose-colored ones.

PALESTINE, Jerusalem. Mr. E. F. Beaumont of the American Colony writes without date that they will make a point of getting some Lallemantia iberica seed when the plant seeds in May. Mr. Whiting, one of the young men of the American Colony, is preparing a report on a tribe of Bedouin whose only bread is made by grinding the seed of the wild Mesembryanthemum Forskahlei, which is about the only plant that grows in the waterless tract east of the Dead Sea where they live. He will also send samples of the seed, flour and bread. They will be glad to send seed of any of the asparagus already sent by them.

PARAGUAY, Cahi Puente. Mr. C. F. Mead writes November 15, "Unfortunately, you will not receive the shipment of potatoes, bascla tuberosa nor the mantioca canes. The freight agent in Yuty, to whom I intrusted the boxes for forwarding to my agent in Asuncion, instead of sending same destroyed the boxes and stole the freight money. It is too late now to duplicate the shipment, so in case you care for same, it will be necessary to wait until July or August of 1911. The bascla tuberosa may be of some value." He will be unable to send us any seeds for the next few months as he will be working in a "barren section of Paraguay, in the southeastern corner parallel to the Alta Parana River, a low lying grazing country with much of it swampy."

PORTUGUESE EAST AFRICA, Inhambane. Mr. Pliny W. Keys writes November 28 that he is using the extract of Cassia bearama in persistent cases of malarial fever, having learned of it and obtained it from the Swiss Mission at Lorenco Marques, by which it is recommended for blackwater fever. While this plant does not grow in his region he has written the London firm who put up the extract to get the address of some one who can furnish seed. He will send us seed, if we wish it, of the famous Conju trees (Anacardium occidentale), the fruit of which is said to be most productive of alcohol.

SPAIN, Barcelona. Senor C. de San Juan writes December 13 offering to send us capers from the Balearic Islands; "Momagastro" grape that is very productive, very early and of great color; also a plum called "Claudia", very big and very good flavor.

BAMBOS TULDA. BAMBOO.

Photograph of a common Bengalese bamboo from Sibpur, Calcutta, taken at Culebra, Canal Zone, December, 1910. Plants planted May, 1908. One of the most useful plants of Bengal, the fiber of which is largely used for mats, baskets, fans and window-blinds. In America the best split bamboos are made from the wood of this species. The young shoots when tender are used as food, and the wood is used for roofing, scaffolding, and baskets. Some forms because of their numerous thorns form excellent hedges. As the walls of the culms are very thick this species has been suggested as a source of supply for bamboo woven lathing, basket material, etc. Grows very rapidly, the specimen in the photograph having attained a height of about 45 feet in three seasons of growth. The species is supposed to stand some frost, is quite drought-resistant, and recommends itself as an ornamental.